



National  
Library  
of Medicine NLM

My NC  
[Sign In] [Regis]

All Databases PubMed Nucleotide Protein Genome Structure OMIM PMC Journals Book  
Search **PubMed** for

Limits Preview/Index History Clipboard Details

Display **Abstract** Show 20 Sort by Send to

All: 1 Review: 0

About Entrez

[Text Version](#)

Entrez PubMed

[Overview](#)

[Help | FAQ](#)

[Tutorial](#)

[New/Noteworthy](#)

[E-Utilities](#)

PubMed Services

[Journals Database](#)

[MeSH Database](#)

[Single Citation Matcher](#)

[Batch Citation Matcher](#)

[Clinical Queries](#)

[LinkOut](#)

[My NCBI \(Cubby\)](#)

Related Resources

[Order Documents](#)

[NLM Catalog](#)

[NLM Gateway](#)

[TOXNET](#)

[Consumer Health](#)

[Clinical Alerts](#)

[ClinicalTrials.gov](#)

[PubMed Central](#)

1: **Oncogene.** 2000 Apr 20;19(17):2098-109.

[Related Articles, Links](#)

 nature publishing group

### **Evi27 encodes a novel membrane protein with homology to the IL17 receptor.**

**Tian E, Sawyer JR, Largaespada DA, Jenkins NA, Copeland NG, Shaughnessy JD Jr.**

Arkansas Cancer Research Center, University of Arkansas for Medical Sciences, Little Rock 72205, USA.

Evi27 is a common site of retroviral integration in BXH2 murine myeloid leukemias. Here we show that integration at Evi27 occurs in a CpG island approximately 6 kb upstream from a novel gene (designated Evi27) with homology to the IL17 receptor (IL17r) and that proviral integrations result in increased expression of the Evi27 protein on the cell surface. The human EVI27 homolog was also cloned and mapped to chromosome 3p21. Multiple Evi27 isoforms were detected at the RNA and protein level in both human and mouse, indicating that Evi27 expression is complex. Some of the isoforms are shown to likely represent secreted soluble forms of the protein produced by intron incorporation or by proteolytic cleavage. In the mouse, highest Evi27 expression occurs in liver and testes with lower expression in kidney and lung. In humans, EVI27 is expressed at high levels in the kidney, with moderate levels in the liver, brain, and testes. Within hematopoietic cells, Evi27 expression is restricted. Northern and Western analysis showed that Evi27 is expressed in selected T-cell, B-cell and myeloid cell lines. These results suggest that Evi27 expression is tightly regulated during hematopoietic differentiation. Collectively, these studies identify a new member of the cytokine receptor family whose increased and uncoordinated expression may lead to myeloid leukemia by altering Evi27's normal ability to control the growth and/or differentiation of hematopoietic cells.

PMID: 10815801 [PubMed - indexed for MEDLINE]

Display **Abstract** Show 20 Sort by Send to